

The State of New Hampshire

Department of Environmental Services



Michael Joyce 44 Rhodes St. Billerica MA 01821



LETTER OF DEFICIENCY WMB-BWQ-2004-04 October 5, 2004

Re: File #1308, Chalk Pond, Newbury, TM 29A, Lot 191,437.

Dear Mr. Joyce:

On October 4, 2004, personnel from the Department of Environmental Services (DES) conducted an inspection of your property at Hilltop Drive more specifically identified on Newbury Tax Map 29A, Lot 191,437 or subdivision lot 66 ("the property"). The purpose of this inspection was to determine compliance with RSA 485-A:8, and Chapter Env-Ws 1700 of the New Hampshire Administrative Rules.

Based on the inspections the following deficiencies were identified:

- A sediment delta is located in the pond adjacent to the stormwater discharge culvert under Gerald Drive.
 The culvert facilitates the flow of stormwater runoff from your property under Gerald Drive and into
 Chalk Pond. As of October 4, 2004, the sediment delta had impacted approximately 200 square feet of
 pond bottom.
- 2. Improperly maintained erosion control on the property. Hay bale and silt fence barriers were collapsed, and sediment piles greater than 6 inches deep were found downstream of the property in the intermittent stream extending from the property to Gerald Drive. Sediment composition clearly indicated this material discharged from your property.

Furthermore, water quality samples and photo documentation collected by a DES trained volunteer were collected on September 18, 2004. Those data indicate a violation of State Water Quality Standards. The results of these sample analyses and station locations are provided below:

Station ID	Station Description	Nephelometric Turbidity Unit (NTU)
HillTop Drive	Sample collected in intermittent stream, upstream of subdivision lots 66 and 67 at a culvert located downstream of subdivision lots 71 and 72. Sample collected to determine intermittent stream background turbidity levels.	5.32
Gerald Drive	Sample collected in intermittent stream, downstream of subdivision lots 66 (the property) and 67, just upstream of Gerald Drive.	21.9
Nearshore 1	Chalk Pond at property discharge influence area within Pond.	17.5
Nearshore 2	Chalk Pond outside of property discharge influence area.	0.58

The background turbidity level for Chalk Pond was 0.58 NTU on September 18, 2004. The measured value of 17.5 NTU at the point of discharge from the property is much higher than background levels of Chalk Pond. Specifically, the deposition of sediment resulting in turbidity and benthic deposits to a Class B waterbody is a violation of the following surface water quality standards:

- a. General Water Quality Criteria [Env-Ws 1703.03] which states that all surface waters shall be free from substances in kind or quantity which settle to form harmful deposits.
- b. Benthic Deposits [Env-Ws 1703.08] which states that Class B waters shall contain no benthic deposits that have a detrimental impact on the benthic (lake bottom) community.
- c. Turbidity [Env-Ws 1703.11] which states that Class B waters shall not exceed the naturally occurring conditions by more than 10 NTUs.

In addition to the deficiencies cited above, wetlands under DES jurisdiction were also impacted. Specifically, 100 linear feet of seasonal stream and another 600 sq. ft. of poorly drained soils on the property were disturbed or filled. During a DES site inspection on August 8, 2003, this area had not been impacted. At the time your contractor, Theodore and Sons, was notified that this area appeared to be jurisdictional wetlands. As of June 8, 2004, this area had been partially cleared of trees and disturbed. The State approved subsurface system design (CA2004062063) indicates a disturbed wetland on the property as of June 18, 2004. Therefore impacts to these wetlands required a permit from the DES Wetlands Bureau. The DES Wetlands Bureau enforcement section has been copied on this Letter of Deficiency.

You are responsible for avoiding future violations of water quality standards. Compliance with the cited deficiencies can be achieved by conducting the following remedial actions:

- 1. Properly install temporary erosion control measures to prevent eroded material from discharging to the intermittent stream and Chalk Pond. DES recommends that the erosion control be installed or inspected by an erosion control professional and maintained until a permanent solution preventing further erosion has been achieved. As discussed in person on October 4, 2004, proper erosion control measures were to be installed within 48 hours. Please notify the DES Watershed Management Bureau in writing of properly installing the temporary erosion control within 7 days of receiving this letter.
- 2. Properly maintain temporary erosion control measures to prevent eroded material from discharging to the intermittent stream and Chalk Pond. DES recommends that the erosion control be inspected and maintained by an erosion control professional following every stormwater runoff event until the property is completely stabilized, preventing any further erosion and sedimentation to the stream and Chalk Pond.
- 3. Submit a specific construction timetable and workplan for soil stabilization on the property within 30 calendar days from receipt of this letter. This should include details on contractor(s) availability, parts order and delivery dates, preliminary site work/assembly, construction, site work/erosion control, final grading, work suspension, and final driveway/ property stabilization. If soil stabilization does not occur before the end of the growing season, all exposed soils should be mulched and tacked after final grading on slopes greater than 3:1. By December 1, 2004, all exposed soils on the property should be mulched and tacked regardless of final grading. However, grading may be necessary to make this easier and effective.

In addition, a report that includes design plans outlining how compliance has been and will be achieved according to the outlined remedial action should be submitted to DES within 30 calendar days from receipt of this letter. In the event that appropriate actions are not taken, DES may order you to take remedial measures as may be necessary. Failure to comply with RSA 485-A:8 will result in enforcement by DES, including but not limited to the issuance of fines, administrative orders, or referral to the New Hampshire Office of the Attorney General for prosecution of civil or criminal penalties. In addition, DES personnel may conduct another inspection at a later date to determine whether you have come into, and are maintaining, full compliance with the applicable statute.

Please be assured that DES appreciates your willingness to cooperate in remedying the water quality impacts and preventing further impacts. I am confident that we can find a solution to the water quality concerns. If you have any questions, please contact Andy Chapman at 603-271-5334 or achapman@des.state.nh.us.

Limnology Center Director

Certified Mail # 7000 1670 0000 0587 7705

 $ATC\mbox{\complaints}\mbox{\$

cc: Gretchen R. Hamel, Legal Unit Administrator, DES
Cal Prussman, Newbury Road Agent
DES Watershed Management Bureau File (#1308)
Bill Thomas, DES Wetlands Bureau Enforcement Section